Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Matter and Mixtures Practice Quiz**

1. Classify the following as a homogenous or heterogeneous mixture.
   1. \_\_\_\_\_\_A bucket of sand and water
   2. \_\_\_\_\_\_Air
   3. \_\_\_\_\_\_Human blood
   4. \_\_\_\_\_\_Chocolate syrup
   5. \_\_\_\_\_\_Sea water
2. Classify each of the following as an element or a compound.
   1. \_\_\_\_\_\_Benzene, C6H6
   2. \_\_\_\_\_\_Aluminum, Al
   3. \_\_\_\_\_\_Fluorine, F2
   4. \_\_\_\_\_\_Aspirin, C9H8O4
   5. \_\_\_\_\_\_Titanium, Ti
   6. \_\_\_\_\_\_Acetylene, C2H2
   7. \_\_\_\_\_\_Zinc, Zn
3. Determine which of the following are pure substances and which are mixtures.
   1. \_\_\_\_\_\_Salt water
   2. \_\_\_\_\_\_Isopropyl alcohol, C3H8O
   3. \_\_\_\_\_\_Mercury, Hg
   4. \_\_\_\_\_\_Ammonia, NH3
   5. \_\_\_\_\_\_An egg yolk
   6. \_\_\_\_\_\_Honey
4. Classify each of the following as a physical or chemical property of sulfur.
   1. \_\_\_\_\_\_Its density is 2.97 g/cm3
   2. \_\_\_\_\_\_It reacts with hydrogen to form a gas
   3. \_\_\_\_\_\_It is a yellow solid
   4. \_\_\_\_\_\_Its melting point is 112°C
   5. \_\_\_\_\_\_It combines with oxygen
5. Classify each of the following as a physical change or a chemical change.
   1. \_\_\_\_\_\_NaCl (table salt) dissolves in water
   2. \_\_\_\_\_\_Silver tarnishes
   3. \_\_\_\_\_\_An apple is cut
   4. \_\_\_\_\_\_Heat changes H2O to steam
   5. \_\_\_\_\_\_Baking soda reacts with vinegar
   6. \_\_\_\_\_\_Iron rusts
   7. \_\_\_\_\_\_Ice melts
   8. \_\_\_\_\_\_Milk sours
   9. \_\_\_\_\_\_Pancakes cook
   10. \_\_\_\_\_\_Paper towel absorbs water
6. Classify each of the pictures below by placing the correct label in the corresponding blank for each picture. Then, write a chemical formula for each substance using the Key and methods we used in class.

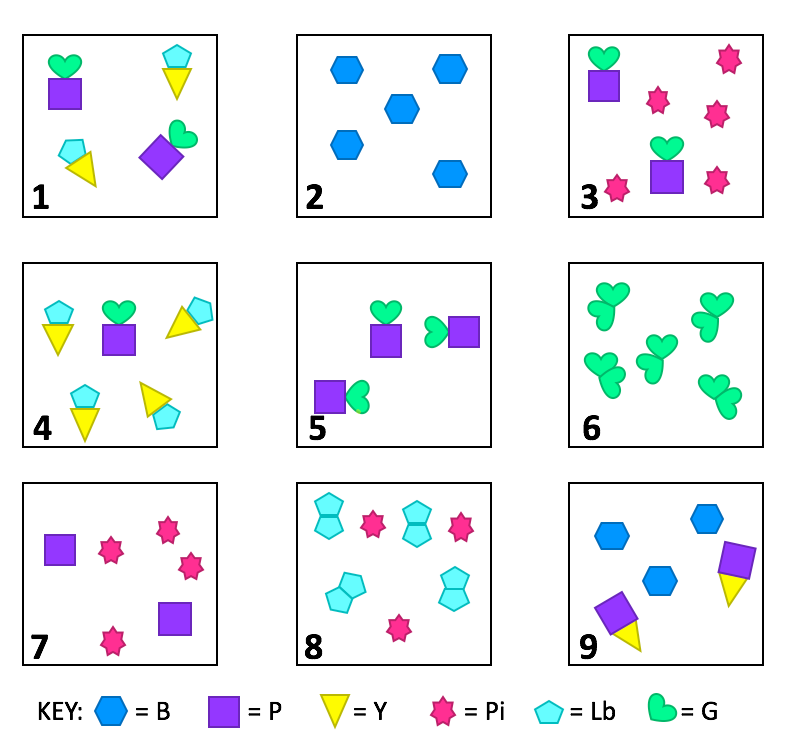
A = element

B = compound

C = mixture of elements

D = mixture of compounds

E = mixture of elements and compounds



|  |  |  |
| --- | --- | --- |
| **Diagram Number** | **Classification (A-E)** | **Chemical Formula (ex: 4 Lb3)** |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |